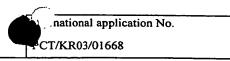


INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference FGPE03-001	FOR FURTHER ACTION see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.				
International application No.	International filing date (day/month/year) (Earliest) Priority Date (day/month/year)				
PCT/KR03/01668	19 AUGUST 2003 (19.08.2003)				
Applicant		15 110 00 51 2002 (15.00.2002)			
LG INNOTEK CO.,LTD et al					
This International search report has been prep to Article 18. A copy is being transmitted to the		Authority and is transmitted to the applicant according			
This international search report consists of a to	otal of4 sheets.				
It is also accompanied by a cop	y of each prior art document cited in the	his report.			
	ernational search was carried out on t s otherwise indicated under this item.	the basis of the international application in the			
the international search was care Authority (Rule 23.1(b)).	ried out on the basis of a translation of	f the international application furnished to this			
b. With regard to any nucleotide and/o was carried out on the basis of the so		the international application, the international search			
contained in the international a	oplication in written form.				
filed together with the internation	onal application in computer readable	form.			
furnished subsequently to this A	Authority in written form.				
furnished subsequently to this A	Authority in computer readable form.				
the statement that the subsequent international application as filed		g does not go beyond the disclosure in the			
the statement that the informatifurnished.	on recorded in computer readable form	n is identical to the written sequence listing has been			
2. Certain claims were found uns	earchable (See Box I).	-			
3. X Unity of invention is lacking (S	See Box II).				
4. With regard to the title,					
X the text is approved as submitted	by the applicant				
	this Authority to read as follows:				
	and realizable to real as removes.				
5. With regard to the abstract,					
x the text is approved as submitted	by the applicant.				
the text has been established, acc	ording to Rule 38.2(b), by this Autho	rity as it appears in Box III. The applicant may,			
within one month from the date	of mailing of this international search	report, submit comments to this Authority.			
6. The figure of the drawing to be published.	shed with the abstract is Figure No.	2			
X as suggested by the applicant.		None of the figures			
because the applicant failed to su	iggest a figure.				
because this figure better charact	erizes the invention.				





Box I Observations where certain claims were found unsearchable (Contin	uation of item 1 of first sheet)			
This international search report has not been established in respect of certain claims u	under Article 17(2)(a) for the following reasons:			
1. Claims Nos.: because they relate to subject matter not required to be searched by this Au	thority, namely:			
2. Claims Nos.: because they relate to part of the international application that do not compeextent that no meaningful international search can be carried out, specifically				
Claims Nos.: because they are dependent claims and are not drafted in accordance with the second seco	he second and third sentences of Rule 6.4(a).			
Box II Observations where unity of invention is lacking (Continuation of it	em 2 of first sheet)			
This International Search Authority found multiple inventions in this international app	plication, as follows:			
I. Claims 1-5 and 11-20 directed to a intermediate layer between a buffer layer II. Claims 6-10 directed to an n-clad layer of GaN-based LED	and an n-clad layer of GaN-based LED.			
	·			
1. As all required additional search fees were timely paid by the applicant, this claims.	international search report covers all searchable			
2. X As all searchable claims could be established without effort justifying an add of any addition fee.	litional fee, this Authority did not invite payment			
3. As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:				
4. No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:				
Remark on Protest	by the applicant's protest.			
No protest accompanied the payment of addit	ional search fees.			

A. CLASSIFICATION OF SUBJECT MATTER

IPC7 H01L 33/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H01L H01S

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Korean patents and applications for inventions, since 1975

Electronic data base consulted during the intertnational search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Х	JP 9-153643 A2 (TOYODA GOSEI KK, TOYODA CHUO KENKYUSHO KK) 10 JUNE 1997 see the paragraph [0010]-[0012], Figure 1	6-9
Α	see the whole documents	1-5, 10-20
A	JP 9-129925 A2 (TOYODA GOSEI KK, AKASAKI ISAMU, AMANO HIROSHI) 16 MAY1997 see the paragraph [0010]-[0011], Figure 1	1 -20
Α	JP 2001-7397 A2 (NICHIA CHEM. IND. LTD) 12 JANUARY 2001 see the whole documents	1 -20
Α	JP 10-173220 A2 (ROHM CO. LTD) 26 JULY 1998 see the whole documents	1 -20
À	JP 7-302929 A2 (SUMITOMO CHEM. CO. LTD) 14 NOVEMBER 1995 see the whole documents	1 -20
Α	JP 7- 254733 A2 (NICHIA CHEM. IND. LTD) 3 OCTOBER 1995 see the Figure 3	1 -20

	1
	Further documents are listed in the continuation of Box C
	i Furgici documents are fisted in the continuation of Box C.

X | See patent family annex.

- * Special categories of cited documents:
- "A"—document defining the general state of the art which is not considered to be of particular relevance
- 'E" earlier application or patent but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed
- "T" later document published after the international filing date or priority

 date and not in conflict with the application but cited to understand
 the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- "&" document member of the same patent family

Date of the actual completion of the international search

24 NOVEMBER 2003 (24.11.2003)

Date of mailing of the international search report

24 NOVEMBER 2003 (24.11.2003)

Name and mailing address of the ISA/KR

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Korean Intellectual Property Office 920 Dunsan-dong, Seo-gu, Daejeon 302-701, Republic of Korea

Facsimile No. 82-42-472-7140

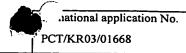
Authorized officer

KIM, Dong Yup

Telephone No. 82-42-481-5749



INTERNATION LARCH REPORT Information Latent family members



Patent document cited in search report	Publication date	Patent family member(s)	Publication date
JP 9-153643 A2	10.06.1997	NONE	
JP 9-129925 A2	16.05.1997	NONE	
JP 2001-7397 A2	12.01.2001	JP 3412563 B2	03.06.2003
JP 10-173220 A2	26.06.1998	NONE	
JP 7-302929 A2	14.11.1995	NONE	
JP 7- 254733 A2	03.10.1995	JP 3180871 B2	25.06.2001